



SEQUENCE LISTING

<110> VALTANEN, Heli et al.

<120> METHOD FOR DESIGNING PEPTIDES

<130> 0933-0238PUS1

<140> US 10/528,989

<141> 2005-03-24

<150> PCT/FI2003/000705

<151> 2003-09-29

<160> 27

<170> PatentIn version 3.3

<210> 1

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic intein Fwd SapI primer

<400> 1

cctttctgct cttccaacgc cgacggggct 30

<210> 2

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic intein Rev PstI primer

<400> 2

actttcaacc tgcagttacc cagcgcccc 30

<210> 3

<211> 59

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide encoding SEQ ID NO: 10

<400> 3

ggtggtgctc ttccaactgt acgaccatt ggggatttac tttatgttaa ctgcaggcg 59

<210> 4

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer used to convert SEQ ID NO: 3 to double-stranded form

<400> 4

cgctgcagt taaca

15

<210> 5

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic degenerate oligonucleotide used in the cloning of the intein-peptide fusions

<400> 5

ggtggttgc tttccaacgg ccgccvavva vtatvavggc tgtaccaccc atttacttta 60
tgtaactgc aggcg 75

<210> 6

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Transposon specific primer

<400> 6

atcagcggcc gcgatcc

17

<210> 7

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Transposon specific primer

<400> 7

ttattcggtc gaaaaggatc c

21

<210> 8

<211> 4

<212> PRT

<213> Unknown

<220>

<223> Peptide derived from phage

<400> 8

Ala Asp Gly Ala

1

<210> 9
<211> 4
<212> PRT
<213> Unknown

<220>
<223> Peptide derived from phage

<400> 9
Gly Ala Ala Gly
1

<210> 10
<211> 10
<212> PRT
<213> Unknown

<220>
<223> CTT-peptide recombinantly prepared by the intein system

<400> 10
Cys Thr Thr His Trp Gly Phe Thr Leu Cys
1 5 10

<210> 11
<211> 10
<212> PRT
<213> Unknown

<220>
<223> Non-cyclic synthetic control peptide

<400> 11
Ser Thr Thr His Trp Gly Phe Thr Leu Ser
1 5 10

<210> 12
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Ala-substitution at residue 2 of the
CTT-peptide (SEQ ID: 10)

<400> 12
Cys Ala Thr His Trp Gly Phe Thr Leu Cys
1 5 10

<210> 13

<211> 10
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Ala-substitution at residue 3 of the CTT-peptide (SEQ ID: 10)

<400> 13

Cys Thr Ala His Trp Gly Phe Thr Leu Cys
1 5 10

<210> 14

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Ala-substitution at residue 4 of the CTT-peptide (SEQ ID: 10)

<400> 14

Cys Thr Thr Ala Trp Gly Phe Thr Leu Cys
1 5 10

<210> 15

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Ala-substitution at residue 5 of the CTT-peptide (SEQ ID: 10)

<400> 15

Cys Thr Thr His Ala Gly Phe Thr Leu Cys
1 5 10

<210> 16

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Ala-substitution at residue 6 of the CTT-peptide (SEQ ID: 10)

<400> 16

Cys Thr Thr His Trp Ala Phe Thr Leu Cys
1 5 10

<210> 17

<211> 10

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Ala-substitution at residue 7 of the
 CTT-peptide (SEQ ID: 10)

 <400> 17
 Cys Thr Thr His Trp Gly Ala Thr Leu Cys
 1 5 10

 <210> 18
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Ala-substitution at residue 8 of a
 mutated CTT-peptide. (SEQ ID: 10)

 <400> 18
 Cys Thr Thr His Trp Gly Phe Ala Leu
 1 5

 <210> 19
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Ala-substitution at residue 8 of the
 CTT-peptide (SEQ ID: 10)

 <400> 19
 Cys Thr Thr His Trp Gly Phe Ala Leu Cys
 1 5 10

 <210> 20
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 CTT-peptide with a tryptophan analogue at position 5

 <220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa at position 5 is 5-OH-Trp, 5-F-Trp or 6-F-Trp

 <400> 20
 Cys Thr Thr His Xaa Gly Phe Thr Leu Cys

1 5 10

<210> 21
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Control sequence

<400> 21
 Cys Glu Arg Gly Gly Leu Glu Thr Ser Cys
 1 5 10

<210> 22
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Control sequence

<400> 22
 Cys Pro Cys Phe Leu Leu Gly Cys Cys
 1 5

<210> 23
 <211> 17
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 CTT-peptide with additional hydrophilic amino acids at positions 2-6 and
 Gly at positions 1 and 7 which is aliphatic

<220>
 <221> misc_feature
 <222> (3)..(4)
 <223> Xaa at positions 3 and 4 is any hydrophilic amino acid

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa at position 6 is any hydrophilic amino acid

<400> 23
 Gly Arg Xaa Xaa Tyr Xaa Gly Cys Thr Thr His Trp Gly Phe Thr Leu
 1 5 10 15
 Cys

<210> 24
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
CTT-peptide of SEQ ID NO: 10 with additional hydrophilic amino acids at
positions 2-6 and Gly at positions 1 and 7 which is aliphatic

<400> 24
Gly Arg Glu Asn Tyr His Gly Cys Thr Thr His Trp Gly Phe Thr Leu
1 5 10 15

Cys

<210> 25
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide derived from phage

<220>
<221> misc_feature
<222> (5)..(5)
<223> Xaa can be any naturally occurring amino acid and (X)n may be present or
absent. Xaa at position 5 is the peptide insertion point.

<400> 25
Ala Asp Gly Ala Xaa Gly Ala Ala Gly
1 5

<210> 26
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: MMP-2 specific fluorescent peptide
substrate

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Xaa is MCA

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Xaa is Nva

<220>

<221> MISC_FEATURE

<222> (6)..(6)

<223> Xaa is Dpa

<400> 26

Xaa Pro Leu Ala Xaa Xaa Ala Arg

1 5

<210> 27

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: recombinant peptide prepared by the intein system

<400> 27

Cys Thr Thr His Trp Gly Phe Thr Ala Cys

1 5 10